

### **Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A machine-implemented method, comprising:

receiving, at a computer system, ~~from a user interacting with a user interface of a data processor, user-generated data comprising:~~

a primary term representing a new first concept to be created in an existing machine-readable network of interrelated concepts, wherein ~~a concept~~ each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation that is defined in the existing machine-readable network of interrelated concepts by a group of synonyms; ~~receiving, from the user interacting with the user interface,~~

a first related term and a second related term that are associated with the primary term and ~~representing that represent~~ the new first concept, the first and the second related terms being synonyms; ~~receiving, from the user interacting with the user interface,~~

information specifying at least one relationship between the new first concept and a second concept; ~~receiving, from the user interacting with the user interface,~~

information specifying a relationship type characterizing the at least one relationship; ~~receiving, from the user interacting with the user interface, and~~

information specifying a strength value characterizing the at least one relationship;

~~representing the association between the primary term and the at least one related term, the at least one relationship, and the relationship type to the user on the user interface;~~

~~receiving a user request, from the user interacting with the user interface, to add the new first concept to the machine-readable network of interrelated concepts; and~~

~~in response to the user request, a semantic engine creating, at the computer system, the new first concept in the existing machine-readable network of interrelated concepts to expand the existing network of interrelated concepts by adding the new first concept to the existing network~~

of interrelated concepts, wherein creating the new first concept comprises adding data representing the primary term, the first and the second related terms, the relationship between the first concept and the second concept, the relationship type, and the strength value to the existing machine-readable network of interrelated concepts to represent the new first concept and the relationship between the first concept and the second concept, wherein the first and the second related terms define the first new concept as members of the group of synonyms that defines the first new concept.

2. (Cancelled)

3. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the user-generated data comprises~~ information characterizing a part of speech of the new first concept.

4. (Previously Presented) The method of claim 1, wherein the relationship comprises a hierarchical relationship or a lateral bond that indicates a proximity of the new first concept to the second concept in semantic space.

5. (Currently Amended) The method of claim 1, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of" and "has product." ~~kind of, has kind, part of, has part, member of, has member, substance of, has substance, product of, or has product.~~

6. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the user-generated data comprises~~ information ~~characterizing that characterizes~~ a frequency of the primary term.

7. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the~~ user-generated data comprises information ~~characterizing that characterizes~~ a likelihood that the primary term and the related terms imply the new first concept.

8. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the~~ user-generated data comprises information ~~characterizing that characterizes~~ a breadth of the new first concept.

9. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the~~ user-generated data comprises information ~~indicating that indicates~~ that the new first concept is offensive.

10. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the~~ user-generated data comprises ~~user data further describing~~ information that describes the new first concept.

11. (Currently Amended) The method of claim 1, ~~further comprising receiving wherein the~~ user-generated data comprises context information.

12. (Currently Amended) A machine-implemented method, comprising:

receiving, from a user interacting with a user interface of a client processor, a request to edit a first concept in an existing machine-readable network of interrelated concepts, wherein a ~~concept~~ each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation and is defined in the existing machine-readable network of interrelated concepts by a group of synonyms;

~~representing the first concept on a display of the user interface for the user, including~~ displaying a first collection particular group of synonyms that define ~~defines~~ the first concept and a description of one or more existing relationships between the first concept and other concepts in the existing machine-readable network of interrelated concepts;

~~receiving, from the user interacting with the user interface, user-generated data comprising:~~

~~information specifying at least one new relationship between the first concept and a second concept; receiving, from the user interacting with the user interface,~~

~~information specifying a relationship type characterizing a type of the at least one new relationship; receiving, from the user interacting with the user interface, and~~

~~information specifying a strength value characterizing a strength of the at least one new relationship; and~~

~~transmitting a request for a semantic engine updating to update the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the strength value representing the updated first concept on the display for the user.~~

13. (Cancelled)

14. (Cancelled)

15. (Previously Presented) The method of claim 12, wherein the new relationship comprises a hierarchical relationship or a lateral bond that indicates a proximity of the first concept to the second concept in semantic space.

16. (Currently Amended) The method of claim 12, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product." ~~kind of, has kind, part of, has part, member of, has member, substance of, has substance, product of, or has product.~~

17. (Currently Amended) The method of claim 12, ~~further comprising receiving wherein the user-generated data comprises~~ information characterizing that characterizes a new frequency of the primary term.

18. (Currently Amended) The method of claim 12, ~~further comprising receiving wherein the user-generated data comprises~~ information characterizing that characterizes a new likelihood that a primary term and related terms imply the first concept.

19. (Currently Amended) The method of claim 12, ~~further comprising receiving wherein the user-generated data comprises~~ information that characterizes characterizing a new breadth of the first concept.

20. (Currently Amended) One or more computer-readable storage devices comprising program code tangibly embodied in machine-readable format and operable to cause one or more machines to perform operations, the operations comprising:

~~receiving, from a user interacting with a user interface, user-generated data comprising:~~

a primary term representing a new first concept to be created in an existing machine-readable network of interrelated concepts, wherein ~~a concept~~ each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation that is defined in the existing machine-readable network of interrelated concepts by a group of synonyms; ~~receiving, from the user interacting with the user interface,~~

a first related term and a second related term that are associated with the primary term and ~~representing that represent~~ the new first concept, the first and the second related terms being synonyms; ~~receiving, from the user interacting with the user interface,~~

information specifying at least one relationship between the new first concept and a second concept; ~~receiving, from the user interacting with the user interface,~~

information specifying a relationship type characterizing the at least one relationship; ~~receiving, from the user interacting with the user interface, and~~

information specifying a strength value characterizing the at least one relationship;

~~representing the association between the primary term and the at least one related term, the at least one relationship, and the relationship type to the user on the user interface;~~

~~receiving, from the user interacting with the user interface, a user request to add the new first concept to the machine-readable network of interrelated concepts; and~~

~~in response to the user request~~, creating the new first concept in the existing machine-readable network of interrelated concepts to expand the existing network of interrelated concepts by adding the new first concept to the existing network of interrelated concepts, wherein creating the new first concept comprises adding data representing the primary term, the first and the second related terms, the relationship between the first concept and the second concept, the relationship type, and the strength value to the existing machine-readable network of interrelated concepts to represent the new first concept and the relationship between the first concept and the second concept, wherein the first and the second related terms define the first new concept as members of the group of synonyms that defines the first new concept.

21. (Cancelled)

22. (Currently Amended) The computer-readable storage devices of claim 20, wherein ~~the operations further comprise receiving the user-generated data comprises~~ information that characterizes ~~characterizing~~ a part of speech of the new first concept.

23. (Previously Presented) The computer-readable storage devices of claim 20, wherein the relationship comprises a hierarchical relationship or a lateral bond that indicates a proximity of the new first concept to the second concept in semantic space.

24. (Currently Amended) The computer-readable storage devices of claim 20, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product." ~~kind of, has kind, part of, has part, member of, has member, substance of, has substance, product of, or has product.~~

25. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations ~~further comprise receiving the user-generated data comprises~~ information characterizing that characterizes a frequency of the primary term.

26. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations further comprise receiving the user-generated data comprises information that characterizes characterizing a likelihood that the primary term and the related terms imply the new first concept.

27. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations further comprise receiving the user-generated data comprises information characterizing that characterizes a breadth of the new first concept.

28. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations further comprise receiving the user-generated data comprises information indicating that indicates that the new first concept is offensive.

29. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations further comprise receiving the user-generated data comprises information user data further describing the new first concept.

30. (Currently Amended) The computer-readable storage devices of claim 20, wherein the operations further comprise receiving the user-generated data comprises context refinement information.

31. (Currently Amended) One or more computer-readable storage devices comprising program code tangibly embodied in machine-readable format and operable to cause one or more machines to perform operations, the operations comprising:

receiving, from a user interacting with a user interface of a client processor, a request to edit a first concept in an existing machine-readable network of interrelated concepts, wherein a concept each concept in the existing machine-readable network of interrelated concepts comprises a normalized semantic representation and is defined in the existing machine-readable network of interrelated concepts by a group of synonyms;

representing the first concept on a display of the user interface for the user, including

displaying a ~~first collection~~ particular group of synonyms that ~~define~~ defines the first concept and a description of one or more existing relationships between the first concept and other concepts in the existing machine-readable network of interrelated concepts;

~~receiving, from the user interacting with the user interface, user-generated data~~  
comprising:

information specifying at least one new relationship between the first concept and a second concept; ~~receiving, from the user interacting with the user interface,~~

information specifying a relationship type characterizing a type of the at least one new relationship; ~~receiving, from the user interacting with the user interface, and~~

information specifying a strength value characterizing a strength of the at least one new relationship; and

transmitting a request for a semantic engine updating to update the machine-readable network of interrelated concepts to reflect the at least one new relationship, the relationship type, and the strength value ~~representing the updated first concept on the display for the user.~~

32. (Cancelled)

33. (Cancelled)

34. (Previously Presented) The computer-readable storage devices of claim 31, wherein the new relationship comprises a hierarchical relationship or a lateral bond that indicates a proximity of the first concept to the second concept in semantic space.

35. (Currently Amended) The computer-readable storage devices of claim 31, wherein the relationship type is selected from the group consisting of: "kind of," "has kind," "part of," "has part," "member of," "has member," "substance of," "has substance," "product of," and "has product." ~~kind of, has kind, part of, has part, member of, has member, substance of, has substance, product of, or has product.~~



36. (Currently Amended) The computer-readable storage devices of claim 31, wherein the operations further comprise receiving the user-generated data comprises information that characterizes a characterizing a new frequency of the primary term.

37. (Currently Amended) The computer-readable storage devices of claim 31, wherein the operations further comprise receiving user-generated data comprises information that characterizes a characterizing a new likelihood that a primary term and related terms imply the first concept.

38. (Currently Amended) The computer-readable storage devices of claim 31, wherein the operations further comprise receiving user-generated data comprises information that characterizes a characterizing a new breadth of the first concept.

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Currently Amended) The method of claim 1, wherein creating the new first concept in the existing machine-readable network of interrelated concepts comprises storing the new first concept in a concept database stored at the computer system a data-storage device.

44. (Cancelled)

45. (Currently Amended) The computer-readable storage devices of claim 20, wherein creating the new first concept in the existing machine-readable network of interrelated concepts

comprises storing the new first concept in a concept database stored at a data storage device ~~one~~ or more of the computer-readable storage devices.

46. (Currently Amended) The computer-readable storage devices of claim 31, wherein updating the machine-readable network of interrelated concepts comprises updating a concept database stored at one or more of the computer-readable storage devices ~~a data storage device.~~

47. (New) The method of claim 1, wherein:  
the relationship type characterizes a direction associated with the at least one relationship,  
and  
the strength value is specific to the direction.

48. (New) The method of claim 47, wherein the strength value between the new first concept and the second concept in the direction associated with the at least one relationship is different than a strength value between the first new concept and the second concept in a direction that is opposite to the direction associated with the at least one relationship.

49. (New) The method of claim 12, wherein:  
the relationship type characterizes a direction associated with the at least one relationship,  
and  
the strength value is specific to the direction.

50. (New) The method of claim 49, wherein the strength value between the new first concept and the second concept in the direction associated with the at least one relationship is different than a strength value between the first new concept and the second concept in a direction that is opposite to the direction associated with the at least one relationship.

51. (New) The devices of claim 20, wherein:  
the relationship type characterizes a direction associated with the at least one relationship,  
and

the strength value is specific to the direction.

52. (New) The devices of claim 51, wherein the strength value between the new first concept and the second concept in the direction associated with the at least one relationship is different than a strength value between the first new concept and the second concept in a direction that is opposite to the direction associated with the at least one relationship.

53. (New) The devices of claim 31, wherein:  
the relationship type characterizes a direction associated with the at least one relationship,  
and  
the strength value is specific to the direction.

54. (New) The devices of claim 53, wherein the strength value between the new first concept and the second concept in the direction associated with the at least one relationship is different than a strength value between the first new concept and the second concept in a direction that is opposite to the direction associated with the at least one relationship.